

1 WHAT IS CLAIMED IS:

2 1. A sole assembly for an orbital sander having a motor having a shaft
3 with an outside end and a drive shaft defined eccentrically on the outside end and
4 having an axis, a distal end and a screw hole defined in the distal end at the axis,
5 and the sole assembly comprising:

6 a sole plate having

7 a top;

8 a bottom;

9 two opposite ends; and

10 an integral bearing seat integrally formed on and protruding
11 from the top and having

12 a top;

13 a top opening defined through the top of the bearing seat;

14 and

15 a bottom recess defined coaxially with the top opening
16 through the bottom of the sole plate;

17 a bearing mounted and held securely in the bottom recess of the bearing
18 seat to hold the distal end of the drive shaft; and

19 two sandpaper clips mounted respectively at the ends of the sole plate.

20 2. The sole assembly as claimed in claim 1, wherein the sole plate further
21 has multiple in-line protrusions formed on the top of the sole plate and arranged
22 in two lines respectively at the ends of the sole plate; and

23 each of the sandpaper clips has a mounting bracket with multiple
24 mounting holes aligned respectively with the protrusions of one of the lines, and

1 each of the mounting holes receives the aligned protrusion;
2 whereby the sandpaper clips are fastened to the top of the sole plate by
3 welding.
4 3. The sole assembly as claimed in claim 2 further comprising a washer
5 and a fastener passing through the washer to screw into the screw hole in the
6 drive shaft to attach the bearing to the drive shaft.